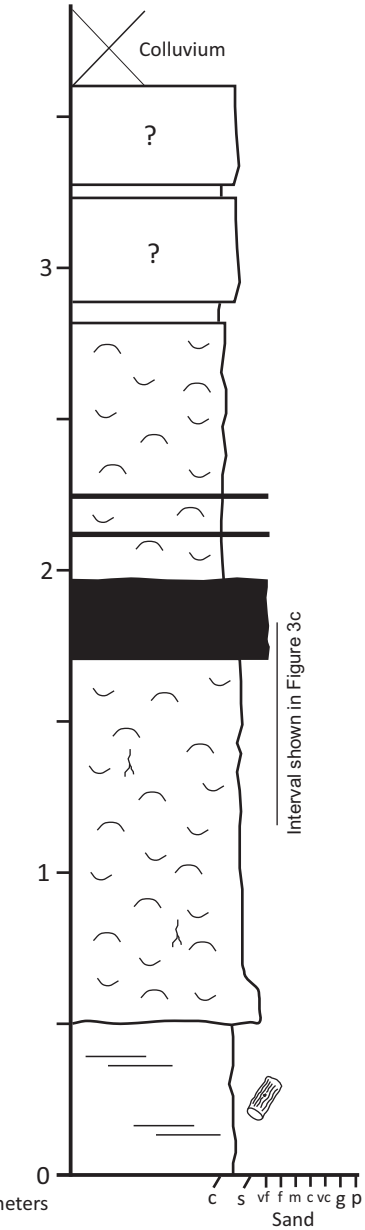


The Mudbank, Hodzana River
Beaver C-3 Quadrangle
66.680 N. Latitude 148.350 W. Longitude

A. 02DL36



Description

Approximately 3-4 meters of additional section discontinuously exposed up-slope, but inaccessible.

Bleached tan-gray to tan-white, slightly silty claystone; blocky to chippy parting; coal seam up to 30 cm thick and at least two carbonaceous mudstone beds (each less than 5 cm thick) are present above 3 m; scattered small lignitic wood fragments to 0.5 cm long; scattered orange-brown iron stains on fracture surfaces. Overall bleached appearance suggests significant volcanic ash content.

Dark brown lignite; plant stems clearly visible.

Brittle, blocky parting, bleached silty clay with abundant scattered twigs immediately below coal; low-relief (15-40 cm relief), concave-up scour surfaces along strike, cut into silty clay and filled with organic-rich silty clay.

Bleached tan-white to brown-gray clayey siltstone; scattered woody material at high angle to bedding - rootlets?

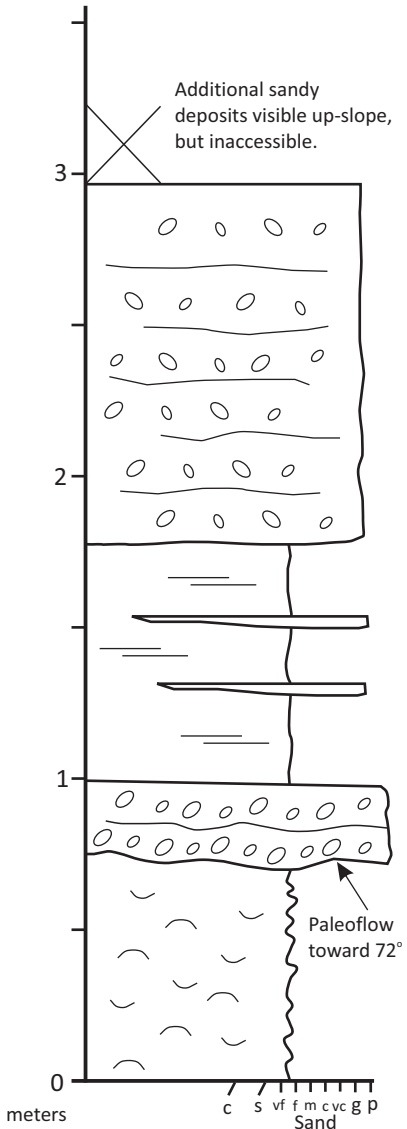
Blue-gray clayey, silty, lvf sandstone.

Brown-gray silty claystone; sub-millimeter thick laminae; abundant plant material in form of woody stems and twigs.

Interpretation

Poorly drained floodplain subjected to occassional incursions of floodwaters from nearby fluvial channel tracts. Fining-upward succession starting at 0.5 m suggests deposition at least a few hundred meters from active channel tracts (distal crevasse splay). Scattered rootlets and irregular blocky weathering character suggest pedoturbation and deposition in a poorly drained floodplain setting subjected to periodic drying. Bleached appearance of silty claystone and clayey siltstone suggests admixed volcanic ash and non-volcanic siliciclastic detritus.

B. 02DL36A
~250-300 meters upstream
(west) of 02DL36



Description

Light gray to brown-gray sandy pebble gravel; unconsolidated; faintly visible planar lamination defined by diffuse pebble trains within sandy gravel.

Light gray to brown-gray very fine-grained sandstone with cm-thick lenses of granule conglomerate; woody debris present as thin, discontinuous cover on gravel lenses; poorly consolidated.

Tan-brown to orange-brown, polymictic, pebble conglomerate; poorly consolidated; well-developed clast imbrication; measurement of single pebble indicates paleoflow toward 72°.

Tan-yellow, locally iron-stained, silty fine-grained sandstone; highly broken into fist-size and smaller irregular-shaped fragments.

Interpretation

Fluvial channel-fill. Channel geometry (braided versus meandering) cannot be determined given the quality of the exposure.

Proximal levee? Blocky parting suggests periodic exposure and development of immature paleosol. Pebble gravel and fine-grained sandstone are tentatively interpreted as proximal crevasse channel-fill deposits. Channel margins were not observed, possibly due to the near coincidence of the exposure trend (east-west) relative to the paleo-transport direction (east-northeast).

Key

- | | | | |
|--|-----------------------------|--|----------------|
| | Clasts | | Blocky parting |
| | Plane-parallel lamination | | Rhizolith |
| | Trough cross-stratification | | Woody material |

Figure 3.